RM PTO-1449 (SUBSTITUTE)

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (37 CFR 1.98(b)

Attor	ney	Do	ock	et	No	.:
		_		_		

Serial No.

GR 96 P 1650 P

09/221,789

Applicant

Ulrike Reeh et al.

Filing Date

Group Art Unit

December 28, 1998

2815

U.S. PATENT DOCUMENTS

EXAMINER INITIALS		PATENT NO.	DATE	PATENTEE	CLASS	SUB CLASS	FILING DATE
	Α	5,998,925	12/07/99	Shimizu et al.			
	В						
	С						
	D						
	E	·					
***	F						
	G						
	Н						
	ı	·		,		, ,,	

FOREIGN PATENT DOCUMENT

	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUB CLASS	TRAI YES	NSL. NO
J							
к							
L							
 М		_					
 N							

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)

P		
İ		
0		

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw lipe through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

	FORM PTO-1	IENT OI	F COMMERCE		Attorney Docket No GR 96 P 1650 F		erial No. 09.	/221,	789
		RMAT	ION DISCLOSURE		Applicant Ulrik	ke Reeh	et al.		
2	ان٠٠		NT BY APPLICANT CFR 1.98(b)		Filing Date		Froup Art (Jnit	
HO	1 2 1999	(37 (J1 1(1.30(b)		December 28, 1	998	28	315 ———	
W	TRADEMARKS		U.S.	PATENT	DOCUMENTS				
Ì	EXAMINER INITIALS		PATENT NO.	DATE	PATENTEE	CLASS	SUB CLASS		ING TE
	//h	Α	3,691,482	09/12/72	Pinnow et al.				
	////	В	3,699,478	10/17/72	Pinnow et al.				
	11//	С	3,819,974	06/25/74	Stevenson et al.				
	7//	D	5,019,746	05/28/91	Merg				
		E							
	-//	F							
		G							
		Н							
		1							
			FOREIC	GN PATE	NT DOCUMENT			·	
	1		DOCUMENT NO.	DATE	COUNTRY	CLASS	SUB CLASS	TRA YES	
	M	j	97 933 047.9		Europe			Х	
	Th	К	198585/1996	07/29/96	Japan			X	
	Th	L	244339/1996	09/17/96	Japan			X	
	1/2	М	245381/1996	09/18/96	Japan			Х	
Ì	1//	N	359004/1996	12/27/96	Japan			Х	
	ОТН	IER DO	OCUMENTS (Inclu	iding Auth	nor, Title, Date, Pe	ertinent Pa	ages, etc	.)	
		0	German Utility Mo		3 615.2, dated Janu liode	ıary 24, 19	991,		
		P	Japanese Patent /	Abstract No	o. 5-152609 (Tadats	u), dated .	June 18, 1	993	
ļ	EXAMINER		7/		DATE CONSIDER	ED			
		///	Jackson		3/00			<u></u>	20.
		ggn cita	ation if not in confor		r not citation is in co I not considered. In				

	FORM PTO-14 U.S. DEPARTMI PATENT AND T	ENT O	FCOMMERCE		Attorney Docket N GR 96 P 1650 I Applicant	D		/221, ⁻	789 —
1			ION DISCLOSURE		Ulri	ke Reeh	et al.		
	2 1999 (37)		NT BY APPLICANT CFR 1.98(b)		Filing Date December 28, 1		roup Art l 28	Jnit 315	
RAI	DEMARKOR		U.S.	PATENT	DOCUMENTS				
	EXAMINER INITIALS		PATENT NO.	DATE	PATENTEE	CLASS	SUB CLASS	FILI DA	
		Α							
		В							
		С							
		D							
		E							
		F							
		G							
		Н							
		1							
		1	FOREIG	GN PATE	NT DOCUMENT	T	SUB	TRAI	NSI
			DOCUMENT NO.	DATE	COUNTRY	CLASS	CLASS	YES	
		J	081010/1997	03/31/97	Japan			Х	
		K							
		L				<u> </u>			
		М							
		N						:	
	ОТН	ER DO	OCUMENTS (Inclu	uding Auth	nor, Title, Date, Pe	ertinent Pa	ages, etc	.)	
		0	Japanese Patent	Abstract 07	7176794 A (Yoshino	ri), dated J	July 14, 19	95	
		Р	Japanese Patent	Abstract 08	3007614 (Yoshinori)		nuary 12, 1	1996	
	EXAMINER		John		DATE CONSIDER	3/	150	7	
	EXAMINER: II Draw line throu next community	igh eiti	citation considered ation if not in confor to applicant.	, whether o	or not citation is in c d not considered. Ir	onformano nclude copy	e with MP y of this fo	EP 60 rm wit)9; th

	FORM PTO-14	·			Attorney Docket No GR 96 P 1650 F		erial No. 09/	/221,	 789
	PATENT AND T				Applicant				
01			ION DISCLOSURE			ke Reeh	et al.		
	(3)		NT BY APPLICANT CFR 1.98(b)		Filing Date Group Art Unit				
MUV	1 2 1999 7	(,		December 28, 1	998	2	815	
7 & T	RADEMARK		U.S. F	PATENT	DOCUMENTS				
	EXAMINER INITIALS		PATENT NO.	DATE	PATENTEE	CLASS	SUB CLASS	FILI	
l	INTIALS	Α	PATENTINO.	DAIL	FATENIEE	CLAGG	CLAGG		<u>'</u>
		В							
		С	·						
		D							
		E					·		
		F							
		G							
		Н							
		ı							
			FOREIG	ON PATE	NT DOCUMENT				
			DOCUMENT NO.	DATE	COUNTRY	CLASS	SUB CLASS	TRAI YES	
		7							
		K				<u> </u>			ļ
		L			•				
		М							
ļ		N		# 100					ļ
	ОТНЕ			_	nor, Title, Date, Pe				
		0	Materialien für Bel in the field of lumir Angew. Chem. 199	euchtungs nescent m 98, 110 pp	Entwickungen auf dr s- und Displayanwen aterials for lighting a b. 3250-3271	dungen" [r ind display	new develo application	opmer	
		Р	Photoluminescence	e Excitation	f Crystal Field and T on of Ce ³⁺ in YAG", c gy, September 1979	J. Electroc	hem. Soc.	: Solid .1550	d -
	EXAMINER	$\overline{\bigcirc}$	7		DATE CONSIDERE				
	EVANALATED: 1-	<i>y</i>	Alaman accident	books			o with MAD	ED 60	<u></u>
	Draw line throw	gh/cita	ation if not in conform	wnetner on mance and	or not citation is in co d not considered. In	clude copy	e with MP of this fo	rm wit	ษ, h
L	next communic	stion t	o applicant.						

15	

							SHEE	ET 4 (OF 7
	FORM PTO-1	1449 (S	UBSTITUTE)		Attorney Docket N		erial No.	1004	700
	U.S. DEPART	MENT O	F COMMERCE		GR 96 P 1650 I	,	09.	/221,	789
OIP	PATENT AND	TRADE	MARK OFFICE		Applicant				
0,	3/ INFO		ION DISCLOSURE		Ulri	ke Reeh	et al.		
NOV 1 2	1999 ~ STA		CFR 1.98(b)		Filing Date		roup Art l		
አ .		•			December 28, 1	1998	2	815	
ENTE TRAC	EMARIE						· · · · · · · · · · · · · · · · · · ·	····	
			U.S.	PATENT	DOCUMENTS				
	EXAMINER INITIALS		PATENT NO.	DATE	PATENTEE	CLASS	SUB CLASS	FILI DA	
		Α							
		В							
		С				1			
		D							
		E							
•		F							
		G							
•		Н							
		ı							
		•	FORFIC	ON PATE	NT DOCUMENT		•		
			r	1	1		SUB	TRAI	VICI
			DOCUMENT NO.	DATE	COUNTRY	CLASS	CLASS	YES	
		J							
		K							
		L							
		М							
		N	·						
	ОТН	HER DO	OCUMENTS (Inclu	ıding Aut	hor, Title, Date, Pe	ertinent Pa	ages, etc	.)	
	1	0	Glen A. Slack et a Wave Numbers", I 1314	l.: "Optica Physical re	I Absorption of Y ₃ Ale eview, Vol. 177, No.	5O ₁₂ from 1 3, 15 Janu	0- to 5500 ary 1969,	00-cm pp. 1	. ₁ 308-
	1/2	Р	Shuji Nakamura e	t al.: "The	blue laser diode: Ga	aN based li	ght emitte	ers and	1

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

EXAMINER

lasers", Springer Verlag, berlin, 1997, pp. 216-219, 328

DATE CONSIDERED

SHEET 5 OF 7

OIP	U.S. DEPARTMI	ENT OF RADEN	•		Attorney Docket N GR 96 P 1650 I Applicant Ulri		erial No. 09/	/221,7	
HOV 1 2	1999 7 STAT	EMEN	NT BY APPLICANT CFR 1.98(b)		Filing Date December 28,		roup Art U 2	Jnit 815	
& TRAC	TEMP		U.S.	PATENT	DOCUMENTS				
	EXAMINER INITIALS		PATENT NO.	DATE	PATENTEE	CLASS	SUB CLASS	FILI	
	111111111111111111111111111111111111111	Α	1711211110	3,2		1			
:		В							
	1-30-	С		· · · · · · · · · · · · · · · · · · ·					
		D							
		E							
`		F							
		G							•
-		н							
		1							
			FOREIG	GN PATE	NT DOCUMENT			1 ==	
			DOCUMENT NO.	DATE	COUNTRY	CLASS	SUB CLASS	TRAN YES J	
		J							
		ĸ							
		L							
		М							
		N							
	OTH	2	•		hor, Title, Date, P				
		0	G. Blasse et al.: "/ Color Television: ` 11, No. 2, 15 Jhul	Yellow-En	osphor For Flying-S nitting $Y_3Al_5O_{12}$ -Ce $^{3^4}$ o. 53,54	pot Cathod ", Applied I	e-Ray Tub Physics Lo	oes For etter, V	r ⁄ol.
		Ρ	White LED Lamp 1996	by Nichia,	copy of a Japanese		er, dated \$	Septem	nber
	EXAMINER				DATE CONSIDER	5/	50		
	EXAMINER: In Draw line throw next communic	igh/elta	ation if not in confor	, whether mance an	or not citation is in c d not considered. It	conformanc nclude copy	e with MP y of this fo	PEP 60 orm with	9; h

	FORM PTO-14	•			Attorney Docket N GR 96 P 1650		erial No.	/221,789
OIP	U.S. DEPARTM PATENT AND T	RADEN			Applicant Ulr	ike Reeh	et al.	
HOV 1 2	1999		NT BY APPLICANT CFR 1.98(b)		Filing Date December 28,		Froup Art U	Jnit 815
ATENT & TRAI	DEMARK		U.S. I	PATENT	DOCUMENTS			
	EXAMINER INITIALS		PATENT NO.	DATE	PATENTEE	CLASS	SUB CLASS	FILING DATE
		Α						
		В						
		С						
		D						
		E						
٥		F		-				
		G						
•		Н			14.61.			
		ı			-			
			FOREIG	SN PATE	ENT DOCUMENT			
			DOCUMENT NO.	DATE	COUNTRY	CLASS	SUB CLASS	TRANSL. YES NO
		J	BOOMENT NO.	<u> </u>				
		К						
		L						
		м						
	-	N						
	ОТН	ER DO	DCUMENTS (Inclu	ıding Aut	hor, Title, Date, P	ertinent Pa	ages, etc	.)
		0			d color rendition in luary 1977, pp. 89-9		re mercur	y vapor
	1//	P			Based On Rare-Ea try and Physics, 16			uorescent
	EXAMINER	4			DATE CONSIDER	RED/		
	EXAMINER: I Draw line three next communi	igh Cita	citation considered ation if not in conforto applicant.	, whether mance an	or not citation is in d d not considered. I	conformanc nclude cop	e with MF y of this fo	PEP 609; orm with

	•					erial No.		7 789
PATENT A	AND TRADEN	MARK OFFICE		Applicant Ulri	ke Reeh	et al.	. "-	
63						A 1	I:4	
35/	(37 (CFR 1.98(b)						
MARKO		U.S. I	PATENT	DOCUMENTS				
		PATENT NO.	DATE	PATENTEE	CLASS	SUB CLASS	FILIN DAT	
	A							
	В							
	С							
	D							
	E							
	F							
	G							
	Н							
	ı							
		FOREIG	GN PATE	ENT DOCUMENT			·	
		DOCUMENT NO.	DATE	COUNTRY	CLASS	SUB CLASS	YES	
	J							
	К							
	L							
	М							
	N							
1	OTHER DO	Frank Möllmer et [Siemens SMT-TO	al.: "Siem DPLEDS f	ens SMT-TOPLED 1	ür die Obe	rflächenm	ontage	e",),
1	P							
	U.S. DEP. PATENT A 1999 37 30	EXAMINER INITIALS EXAMINER INITIALS A B C D E F G H I V N OTHER DO	STATEMENT BY APPLICANT (37 CFR 1.98(b)) U.S. I EXAMINER INITIALS PATENT NO. A B C D E F G H I FOREIC DOCUMENT NO. J K L M N OTHER DOCUMENTS (Included in the content of	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT BY APPLICANT (37 CFR 1.98(b)) U.S. PATENT EXAMINER INITIALS PATENT NO. DATE A B C D E F G H I FOREIGN PATE J K L M N OTHER DOCUMENTS (Including Automore) SMT-TOPLEDS files in 1991, No. 4, pp. 147-149	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT BY APPLICANT (37 CFR 1.98(b)) U.S. PATENT DOCUMENTS EXAMINER INITIALS PATENT NO. DATE PATENTEE A B C D E F G G H I FOREIGN PATENT DOCUMENT J K L M N OTHER DOCUMENTS (Including Author, Title, Date, Patents) Frank Möllmer et al.: "Siemens SMT-TOPLED for Surface mounting 1991, No. 4, pp. 147-149	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT BY APPLICANT (37 CFR 1.98(b)) U.S. PATENT DOCUMENTS EXAMINER INITIALS PATENT NO. DATE B C D D E F G G D D E F G G D C D D E F G G D C D D E F G G D C D D D E F G G D D D D E F G G D D D D D D D D D D D	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT BY APPLICANT (37 CFR 1.98(b)) U.S. PATENT DOCUMENTS U.S. PATENT DOCUMENTS EXAMINER INITIALS PATENT NO. DATE PATENTEE CLASS CLASS A B C C D E F G G H I FOREIGN PATENT DOCUMENT FOREIGN PATENT DOCUMENT FOREIGN PATENT DOCUMENT FOREIGN PATENT DOCUMENT OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc. 1991, No. 4, pp. 147-149) Frank Möllmer et al. "Siemens SMT-TOPLED für die Oberflächenm [Siemens SMT-TOPLEDS for surface mounting], Siemens Componer 1991, No. 4, pp. 147-149	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT BY APPLICANT (37 CFR 1.98(b)) U.S. PATENT DOCUMENTS U.S. PATENT DOCUMENTS EXAMINER INITIALS PATENT NO. DATE PATENTEE CLASS CLASS DATE B C C D EXAMINER INITIALS PATENT NO. DATE PATENTEE CLASS CLASS DATE F G G H I F G G H I FOREIGN PATENT DOCUMENT FOREIGN PATENT DOCUMENT FOREIGN PATENT DOCUMENT OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.) OFFrank Möllmer et al.: "Siemens SMT-TOPLED für die Oberflächenmontage 1991, No. 4, pp. 147-149

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

			(DC)			SHE	ET 1	OF 1
FORM PTO-1449 (SUBSTITUTE)				Attorney Docket No).: Se	Serial No.		
U.S. DEPARTM		F COMMERCE	R 96 P 1650 P 09/221,789					
PATENT AND T	RADE	MARK OFFICE	7 6 2000	applicant	ra Daah	ot ol		
INFO	RMAT	ION DISCLOSURA	ZE TRADEMAR	y Olrik	ke Reeh	et al.		
(37 CFR 1.98(b)				Filing Date Group Art Unit December 28, 1998 2815				
				December 28, 1	998	2	2010	
		U.S.	PATENT [DOCUMENTS				
EXAMINER INITIALS		PATENT NO.	DATE	PATENTEE	CLASS	SUB CLASS		ING ATE
INTIALS	A	FAILNI NO.	DATE	FAILNILL	CLASS	CLASS		<u> </u>
	В							
	c							
	D					1.7		
	E					17.0.7		*
	F					100 100 100 100 100 100 100 100 100 100	00	<u> </u>
	G					0.7%		S
	Н						23 70	=
	ī					ROOM	2	3
		FOREIG	GN PATEN	T DOCUMENT				
	1]	SUB	TRA	NSL.
in in	 	DOCUMENT NO.	DATE	COUNTRY	CLASS	CLASS	YES	NO
	J	2 347 289	04/18/74	Germany				X
///h	K	33 15 675 A1	11/03/83	Germany				X
1//	L	38 04 293 A1	08/24/89	Germany				Х
	M	0 486 052 A1	05/20/92	Europe			X	
	N							
ОТН		OCUMENTS (Incl	uding Auth	or, Title, Date, Pe	rtinent Pa	ges, etc.))	
	0	Siemens Forsch u. EntwicklBer. Bd 6 (1977) No. 3, p. 162 [Siemens research and development reports, vol. 6];						
	Р	S. N. Mohammad et al.: "Emerging Gallium Nitride Based Devices", Proceedings of the IEEE, Vol. 83, No. 10, October 1995, pp. 1306-1355;						
EXAMINER	$\overline{\mathcal{N}}$	7 /		DATE CONSIDERED				

EXAMINER: Initial it citation considered, whether or not citation is in conformance with MPEP 609; Draw line through elation if not in conformance and not considered. Include copy of this form with next communication to applicant.